

Title (en)  
METHOD FOR PRODUCING POSITIVE ACTIVE MATERIAL PRECURSOR AND POSITIVE ACTIVE MATERIAL FOR LITHIUM SECONDARY BATTERIES, EXHIBITING CONCENTRATION GRADIENT, AND POSITIVE ACTIVE MATERIAL PRECURSOR AND POSITIVE ACTIVE MATERIAL FOR LITHIUM SECONDARY BATTERIES, EXHIBITING CONCENTRATION GRADIENT, PRODUCED BY SAME

Title (de)  
VERFAHREN ZUR HERSTELLUNG EINES POSITIVAKTIVMATERIALVORLÄUFERS UND POSITIVAKTIVMATERIAL FÜR LITHIUMSEKUNDÄRBATTERIEN MIT KONZENTRATIONSGRADIENT UND NACH DIESEM VERFAHREN HERGESTELLTER POSITIVAKTIVMATERIALVORLÄUFER UND POSITIVAKTIVMATERIAL FÜR LITHIUMSEKUNDÄRBATTERIEN MIT KONZENTRATIONSGRADIENT

Title (fr)  
PROCÉDÉ DE PRODUCTION DE PRÉCURSEUR DE MATÉRIAU ACTIF POSITIF ET DE MATÉRIAU ACTIF POSITIF POUR BATTERIES SECONDAIRES AU LITHIUM PRÉSENTANT UN GRADIENT DE CONCENTRATION, ET PRÉCURSEUR DE MATÉRIAU ACTIF POSITIF ET MATÉRIAU ACTIF POSITIF POUR BATTERIES SECONDAIRES AU LITHIUM PRÉSENTANT UN GRADIENT DE CONCENTRATION PRODUITS SELON CE DERNIER

Publication  
**EP 3242348 A1 20171108 (EN)**

Application  
**EP 15875469 A 20150724**

Priority  
• KR 20140195306 A 20141231  
• KR 2015007718 W 20150724

Abstract (en)  
Disclosed are a method for manufacturing a lithium secondary battery positive active material exhibiting a concentration gradient and a lithium secondary battery positive active material exhibiting a concentration gradient, manufactured by the method, and more particularly, a method for manufacturing a lithium secondary battery positive active material exhibiting a concentration gradient and a lithium secondary battery positive active material exhibiting a concentration gradient, manufactured by the method, the method being characterized by forming a barrier layer so as to maintain a concentration gradient layer even in case of thermal diffusion by a subsequent thermal treatment process.

IPC 8 full level  
**H01M 4/36** (2006.01); **H01M 4/505** (2010.01); **H01M 4/525** (2010.01); **H01M 10/052** (2010.01)

CPC (source: EP KR US)  
**C01G 53/00** (2013.01 - KR); **C01G 53/006** (2013.01 - EP US); **C01G 53/44** (2013.01 - EP US); **H01M 4/366** (2013.01 - EP KR US); **H01M 4/505** (2013.01 - EP KR US); **H01M 4/525** (2013.01 - EP KR US); **H01M 10/052** (2013.01 - KR); **H01M 10/0525** (2013.01 - EP US); **C01P 2002/50** (2013.01 - US); **C01P 2002/85** (2013.01 - EP US); **C01P 2004/03** (2013.01 - EP US); **C01P 2006/40** (2013.01 - US); **H01M 2004/028** (2013.01 - US); **Y02E 60/10** (2013.01 - EP); **Y02T 10/70** (2013.01 - US)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**US 10749205 B2 20200818**; **US 2017288262 A1 20171005**; CN 107112516 A 20170829; CN 107112516 B 20210202; EP 3242348 A1 20171108; EP 3242348 A4 20180801; EP 3242348 B1 20240103; HU E065453 T2 20240528; JP 2018506140 A 20180301; JP 6722673 B2 20200715; KR 101953155 B1 20190228; KR 20160081452 A 20160708; PL 3242348 T3 20240520; WO 2016108375 A1 20160707

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**US 201715630014 A 20170622**; CN 201580071865 A 20150724; EP 15875469 A 20150724; HU E15875469 A 20150724; JP 2017533200 A 20150724; KR 20140195306 A 20141231; KR 2015007718 W 20150724; PL 15875469 T 20150724